Implementation Guidance for 75-5-222, MCA (Variances)

DRAFT, Version 1

June 2016

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Document Number

Suggested citation: <Prepared by>.<year>.<Title>. Helena, MT: Montana Dept. of Environmental Quality.

GUIDANCE SUMMARY

Pending…

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS

1.0 INTRODUCTION

The purpose of this document is to provide guidance for implementing statute at 75-5-222, MCA and rules that have been written under it. This guidance was developed cooperatively between DEQ and an advisory group that met with DEQ between January 2016 and XX. Minutes of the groups discourse may be found at http://deq.mt.gov/Water/WQPB/standards/SB325Rulemaking .

1.1 GUIDANCE OVERVIEW

The figure below summarized the basic flow path of activities an applicant should (or must) be considered when determining if a variance under 75-5-222(2), MCA is applicable for them.

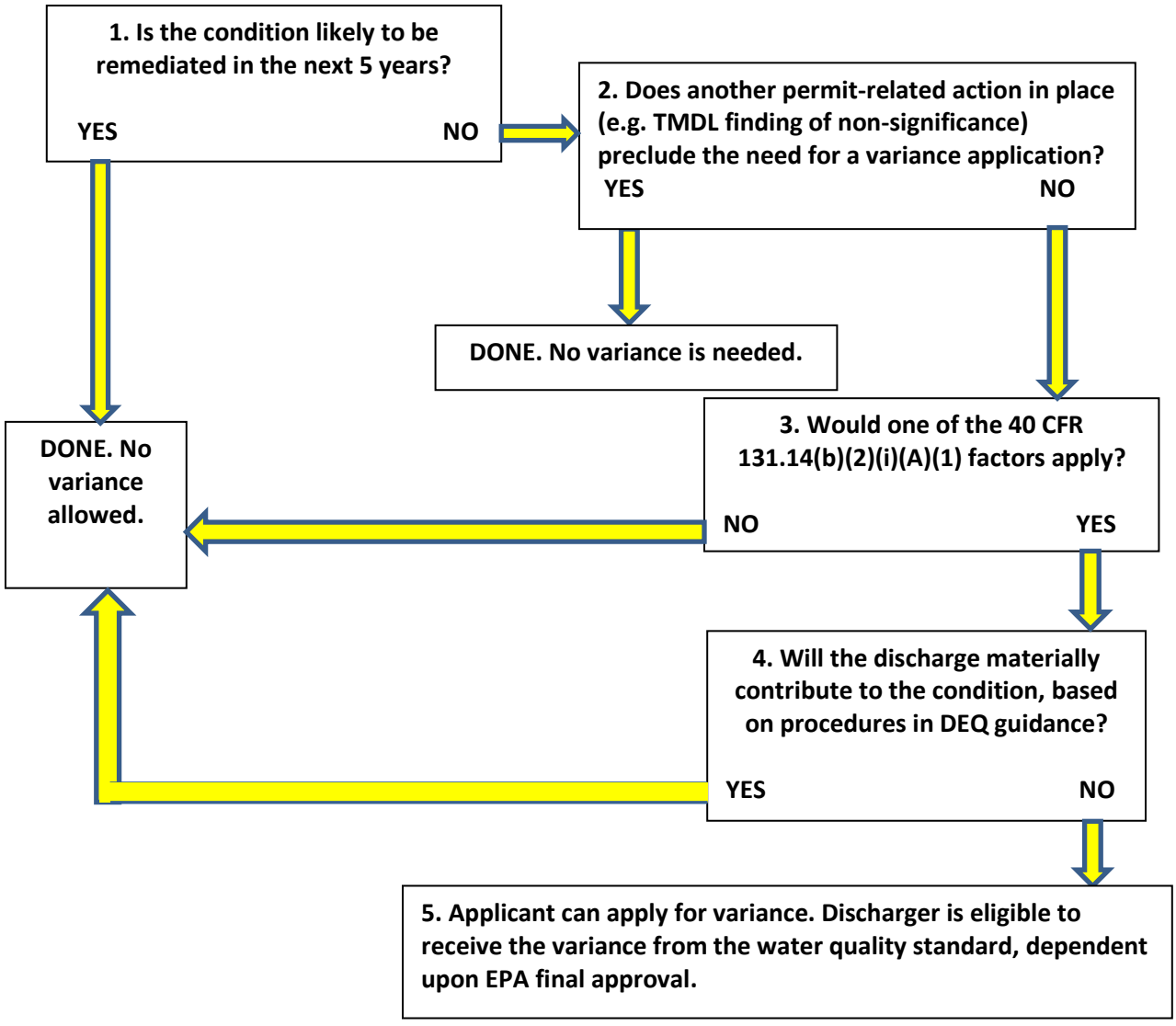

Figure 1-1. Overview of Activities Presented in this Guidance Document.

2.0 DETERMINING IF A VARIANCE IS APPROPRIATE

The following sections provide details on the topics presented in **Figure1-1**.

2.1 WILL THE CONDITION BE REMEDIATED IN THE NEXT 5 YEARS?

This is probably the first question the applicant will want to answer because, per statute, the answer will determine whether a variance is even allowable. 75-5-222, MCA states that if the condition can reasonably be expected to be remediated within the next five-year period, a discharger is not eligible for a variance. That is why it is the first box in the series of steps in **Figure 1-1**.

So how does one go about determining if a water quality problem is soon to be remediated? The potential applicant should first check with the DEQ's Waste Management and Remediation Division. They are responsible for overseeing cleanup activities at state and federal Superfund sites, abandoned mine lands, etc., and would be aware if anything is planned or ongoing at the stream in question. Contacts for this DEQ dDivision can be found at:

http://deq.mt.gov/DEQAdmin/about/DEQStaffDirectory#rem

If there is no definitive answer that the water quality problem will be remediated within 5 years, the applicant can presume the answer is "no", and move to Box 2 of **Figure 1-1**.

2.2 OTHER PERMIT-RELATED ACTIONS PRECLUDE THE NEED FOR THE VARIANCE

Does another permit-related action in place (e.g. TMDL finding of non-significance) provide the discharger options that may preclude the need for a variance application? Another permit-related action such as a TMDL finding of non-significance would not automatically preclude the discharger from being able to pursue a variance (**Figure 1-1**), but would inform the discharger that another option was available; having the information would allow the discharger to make an informed decision whether or not to move forward with a variance application. TMDLs are completed in the Water Quality Planning Bureau and implemented in permits in the Water Protection Bureau. TMDLs can be complex documents to navigate and readers would probably locate the information they want most quickly be directly contacting the TMDL Section Supervisor (as of this writing that is Dean Yashan, (406) 444-5317, DYashan@mt.gov). The permit writer assigned to the facility in question should also be contacted as they have information on how the TMDL-developed permits limits are being implemented.

2.3 DOES ONE OF THE SIX FACTORS OF 40 CFR 131.14(B)(2)(I) APPLY?

Unless one of the six factors presented below applies to the applicant, the variance will not be granted by EPA. EPA final approval is a requirement of the variance. This is in line with Montana statute, which requires the board to "adopt rules consistent with comparable federal rule and guidelines…" (75-5-222(2)(a), MCA).

1. Naturally occurring pollutant concentrations prevent the attainment of the use; or
2. Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient

volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or

3. Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or
4. Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or
5. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or
6. Controls more stringent than those required by sections 301(b) and 306 of the Act[1] would result in substantial and widespread economic and social impact.

Factor 1 above is addressed in part 1 of the same statute this guidance addresses (75-5-222(1)), MCA) and will not be discussed here. Factor 2 is, to DEQ's knowledge, not generally applicable to the situations that 75-5-222(2), MCA was written to address. Factor 3 may apply but has not been accepted so far as a variance rationale by EPA. Further, the exact means by which an applicant would carry out the demonstration is not clear. Applicants considering using Factor 3 should consult with DEQ's Water Quality Standard Modeling Section staff before commencing a Factor 3 analysis. Factor 4 is addressed by other laws (75-5-306, MCA and ARM 17-30-636). Factor 5 is, to DEQ's knowledge, not generally applicable to the situations that 75-5-222(2), MCA was written to address.

Therefore, among the factors, factor 6 is probably the best factor for an applicant to pursue. The applicant must demonstrate that achieving the water quality standard end-of-pipe (in **Figure 2-1**, this would be 25 mg/L) would cause substantial and widespread economic impact to the community. DEQ has developed extensive and detailed guidance on how to carry out the substantial and widespread analysis for both public entities and the private sector. Please see Section 3 of DEQ's "Base Numeric Nutrient Standards Implementation Guidance, Version 1" (July 2014) located at:

http://deq.mt.gov/Water/WQPB/Standards

Excel spreadsheets containing all the calculations necessary to complete the substantial and widespread analysis can be obtained from DEQ's Water Quality Standards Modeling Section.

2.4 Determining if the Discharge will Materially Contribute to the Condition

Each situation will be different and the exact method by which DEQ determines material contribution to the condition will vary. Pollutants will be grouped as carcinogens, toxics, and harmful parameters, and each grouping will be treated according to the properties of the pollutants within the group, with additional categorization as necessary (e.g. metals, salinity, etc.). DEQ will be more stringent when

[1] The two CWA sections referenced pertain to the national secondary treatment standards for municipal waste (303(b)) and the national standards for performance for specific industrial discharger categories (306). Effluent limits based on water quality standards (e.g., Circular DEQ-7) are usually more stringent that these requirements.

reviewing carcinogens vs. toxics vs. harmful parameters. One scenario which is likely to be encountered is provided below, and begins with **Figure 2-1** to illustrate the subject.

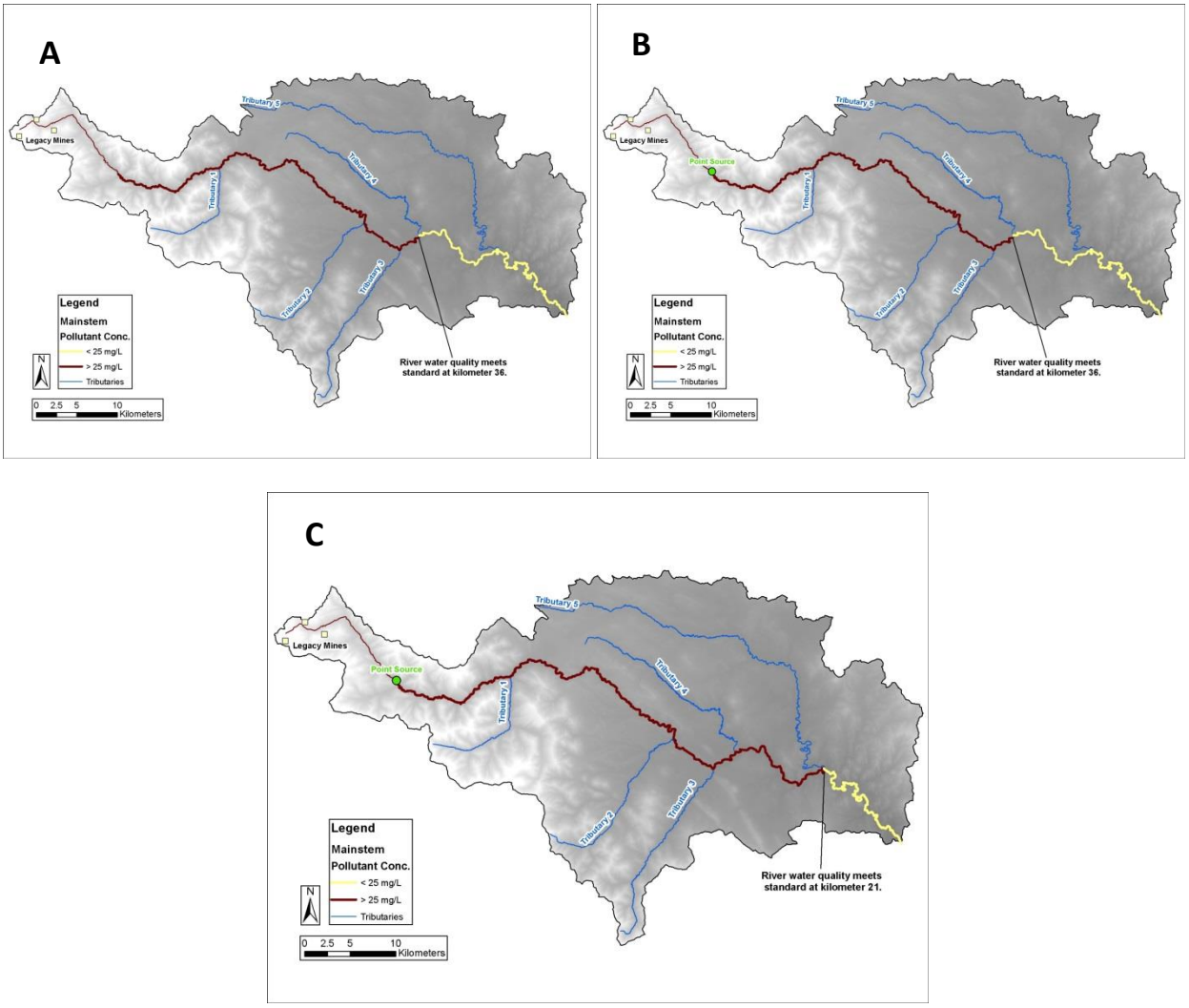

Figure 2-1. Example scenarios which may or may not materially contribute to the water quality condition.

A. Due to legacy mining in the headwaters, the hypothetic water quality standard (25 mg/L) would not be attained until km 36 of the river, even if there were no point source in the watershed. **B**. A point source is discharging to the non-attaining reach, but does not extend the longitudinal length of the reach which does not attain the standard; the point source may or may not materially contribute (see discussion in text). **C**. Due to the point source's contribution, the standard is not attained until an additional 15 km of river; here, the point source does materially contribute.

In **Figure 2-1A**, the affected river is shown as it would exist even if the point source was not present (this can readily be back-calculated using ambient data and facility discharge data). In **Figure 2-1B**, the point source has not extended the distance over which the standard is not attained. It may or may not be materially contributing, depending upon how much more above the standard it has elevated the concentration of the pollutant of concern in the non-attaining reach. There are no hard and fast rules

regarding “how much is too much” above, but as a guide DEQ would be concerned most about carcinogens, then toxics, and least concerned about harmful parameters. Depending on the degree of increase and the parameter, it may result that the scenario in **Figure2-1B** does not materially contribute to the water quality condition. **Figure 2-1C** denotes the case where the length of river above the water quality standard has been extended longitudinally due to the point source, and regardless of the parameter, this would be considered material contribution.

DEQ will use is discretion, on a case-by-case basis, to determine what is reasonable when carrying out its evaluations. For example, it may result that a point source only extends the non-attainment reach for another 100 m; this small difference could probably be considered as “not materially contributing”.

If the applicant has demonstrated one of the 6 factors apply (probably Factor 6), and has met the other conditions of the statute, as outlined in **Figure 1-1**, the applicant is eligible for a variance from the water quality standard in question.

3.0 Dataset Minimums to Carry out Section 2.0 Evaluations

Pending more development..

3.1[Second-level Sections As Needed]

4.0 After the Variance: Guidance on Characterizing Upstream Water Quality Over the Previous Variance Period

Pending more development…

4.1 [Second-level Sections As Needed]

5.0 References